### REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave Blan	nk) 2. REPORT DATE 2 May 1996	3. REPORT	TYPE AND DATES COVERED		
			PROFESSI	ONAL PAPER	
4. TITLE AND SUBTITLE			5. FUNDING	NUMBERS	
BREAKING THE ICE - TEST AND PARTNERSHIP	D TRAINING INTEGRATION: T	HE NEW			
6. AUTHOR(S)					
Larry Hill					
7. PERFORMING ORGANIZATION COMMANDER NAVAL AIR WARFARE CENTEI 22541 MILLSTONE ROAD PATUXENT RIVER, MARYLANI	R AIRCRAFT DIVISION		8. PERFORT	MING ORGANIZATION NUMBER	
9. SPONSORING / MONITORING A	AGENCY NAME(S) AND ADDRESS	(ES)		ORING / MONITORING	
COMMANDER NAVAL AIR SYSTEMS COMMA 1421 JEFFERSON DAVIS HIGHW ARLINGTON, VA 22243			AGENCY	Y REPORT NUMBER	
11. SUPPLEMENTARY NOTES		<del></del>			
12a. DISTRIBUTION / AVAILABILI	TY STATEMENT		12b. DISTR	IBUTION CODE	
APPROVED FOR PUBLIC RELEA	ASE; DISTRIBUTION UNLIMIT	ED.			
13. ABSTRACT (Maximum 200 word	ds)				
World events in recent years have p and revise our defense strategy whi realigned, and budgets were signific DOD. The coined phrase, "doing n personnel, and facilities) is having a shrinks so to does the workload of t problems plague the operational for as usual. For instance the Fleet doe continues to downsize and consolid resourceful ways to maintain a stron	ich in turn led to major DOD down cantly cut. The ramifications of the more with less" is becoming the rea an adverse impact on both the T&E the acquisition infrastructure howe rees as well. With the reduced ope es not have the funding to steam to date the military, it becomes increas	sizing. Our armed for ese changes have alreadity rather than just a read and training community the need to maintaing funds, the operathe traditional training singly important to fin	ces were reduced and and are connection. The lonaities across that these uniquational units has a locations as i	ced, military bases closed and or ntinuing to be felt throughout ss of resources (funding, e services. As the DOD budget he capabilities does not. Similar tive fewer dollars to do business in the past. As the trend	
14. SUBJECT TERMS DOD; T&ECold War				15. NUMBER OF PAGES 23	
DOD, TWD,COM Wai				16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASS OF ABSTRACT	IFICATION	20. LIMITATION OF ABSTRACT	
UNCLASSIFIED	UNCLASSIFIED	UNCLASSIF	IFD	N/A	

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89) Prescribed by ANSI Std. Z39-18 298-102

19960620 108

DESCRIPTION OF THE PARTY

E mel (s)

tom: Public Affairs Office (7.5) 1260, JP1 o:			
subj:			
the attached material has been submitted for public mark any necessary changes by bracketing the mote se made (i.e., security, accuracy, or palicy). Do not	rial to be changed or dele	eted and indicating why	the form. Please the change must
Socurity Review			
<ul> <li>Indicate type cognizance your division has, if partial or none, add the cognizant code.</li> </ul>	PRIME PARTIAL NONE	PRIME PARTIAL NONE	PRIMEPARTIALNONE
. What contract is this release associated within	Contract #:		
C. Does this document contain critical technology as listed in the Military Critical Technologies List (M If so, cite MCTL paragraph. (Capies of the MCTL or	Cirls		
available for review from AIR-071.)	YESNO		YESNO
D. Is this document classified?	YESNO	YESNO	YESNO
E. It other than <u>UNCLASSIFIED</u> , have you paragraph marked the classified parts and cited supporting tationals?	YES NO	YESNO	YESNO
obs ches robbutual terms ross.			
S. General Review			
A. 6 the matter, as submitted, factually accurate?	LYES_NO	Y85NO	vesno
Is review outside NAVAIRSYSCOM considered necessary?     If so, by whom?	TAEZ NO	YESNO	YESNO
C. Do you recommend release of the attoched material?	VESNO	yesno	755NO
D. If the conswer to (C) above is NO, check one: (1)  [2] Objection is based on reasons other than  E. Signature and code of person(s) completing  F. Remarks:	security. H (2), hussasse w	on security.  by under coments.  Code:  Dete:	4/24/96
		- Advan	
AIR-7.4.1:	AIR-7.4.1:		
PLEASE RETURN TO ROOM 1269.	-		DEFICE MAIL.
	E - 604-2822,		>
· · · /	A NAVAIR P	20 \$2,402 804 518	:80 98/53/70
Give to		90	wy W
		J \*	while Bobn

### "BREAKING THE ICE"

Test and Training Integration: The New Partnership

Larry Hill, Atlantic Test Ranges

Naval Air Warfare Center Aircraft Division, Patuxent Rive

### **ABSTRACT**

World events in recent years have precipitated a string of major changes within the Department of Defense (DoD). The end of the Cold War caused us to re-think and revise our defense strategy which in turn led to major DoD downsizing. Our armed forces were reduced, military bases closed and or re-aligned, and budgets were significantly cut. The ramifications of these changes have already and are continuing to be felt throughout DoD. The coined phrase, "doing more with less" is becoming the reality rather than just a notion. The loss of resources (funding, personnel, and facilities) is having an adverse impact on both the Test & Evaluation (T&E) and training communities across the services. As the DoD budget shrinks so to does the workload of the acquisition infrastructure however, the need to maintain these unique capabilities does not. Similar problems plague the operational forces as well. With the reduced operating funds the operational units have fewer dollars to do business as usual. For instance the Fleet does not have the funding to steam to the traditional training locations as in the past. As the trend continues to downsize and consolidate the military, it becomes increasingly important to find more cost effective, innovative and resourceful ways to maintain a strong national defense without compromise to readiness.

The concept of merging the T&E and training requirements is not a new one, but the impact of recent changes has forced the issue. The defense build up era of the 80's, where resources were once plentiful, has passed. One option to consider in resolving this issue is to maximize the utilization of our T&E resources by providing training support to the operational forces. The T&E Group of the Naval Air Warfare Center Aircraft Division (NAWCAD) Patuxent River has recognized the need and the benefits to both the T&E and the training communities and has taken a very aggressive role in promoting "Test and Training Integration: The New Partnership." Since June of 1994, NAWCAD has been working closely with several major commands of the Atlantic Fleet (NAVAIRLANT, CINCLANTFLT, SECOND FLEET) to explore and develop ways in which the T&E facilities and resources of Pax River may be used to support Fleet and Joint Task Force training requirements. The initiative was received with great enthusiasm by the Fleet to the point that COMNAVAIRLANT tasked Carrier Airwing Eight to assess the capabilities and resources of Pax River and how they may be used to support the various levels of training (unit level through large scale joint task force type exercises).

This paper will present a chronological report of the initiatives to date to include the lessons learned, the findings of Carrier Air Wing Eight's (CVW-8) assessment of our capabilities and their application to Fleet training, our continuing efforts, and the potential for future opportunities. It will demonstrate NAWCAD's efforts in "breaking the ice" between the once divided communities and the beginning of a new found partnership.





## TEST & EVALUATION GROUP ATLANTIC RANGES & FACILITIES NAVAIRWARCENACDIV PATUXENT RIVER, MD

Approved for Public Release, Distribution Unlimited



### Historically

- Atlantic Fleet Training Ranges and East Coast Test Ranges have operated autonomously with few exceptions.
- NAWC-AD has routinely supported Fleet Training:
- Direct Support:
- Target Hulk Preparation/Instrumentation/Operation
- Vandal Launches (Off-Shore @ NASA Wallops)
- FLEETEX & MISSILEX
- Indirect Support:
- (PMA-248) for Training Range Instrumentation Systems Via NAVAIR Tactical Training Ranges Program Office Development and Installation (TACTS, LATR, JTCTS, RBSS, TASETS, Nike Radar Support, etc.)
- PCDS (TACTS PC Based Debriefing System) for ANG



## Changing Environment

- World events in recent years have precipitated a string of major changes within DoD .....
- End of the Cold War
- Changed Threat (i.e. Third World, Regional Conflicts)
- Revised Defense Strategy
- DoD Downsizing
- Force Reductions
- Military Base Closures, Consolidations, & Re-alignments
- Budget Cuts
- These changes, while all positive, have had a significant impact on both the Acquisition and Operational Communities.



# Different Perspectives - Shared Problems

DoD Downsizing =

### Operational Forces:

- Force ReductionsForce Consolidations
- Reduced O&M Funding
- Loss of Resources

### Test & Evaluation:

- Fewer Acquisition Programs
- Reduced Workload
- Reduced MRTFB Funding
- Transition to DBOF



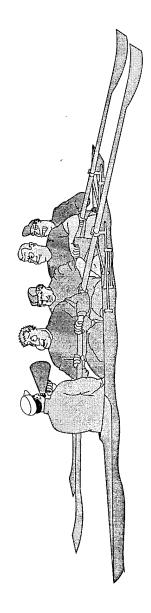
necessary to support the RDT&E of new weapon systems as they Testers still need to maintain the capabilities & resources emerge, and

the deployed forces still need to maintain a high state of readiness and profiency to defend our national interest at a reduced risk to loss of life and property.

The Bottom Line



# "WE'RE ALL IN THE SAME BOAT"



"HAVING TO DO MORE WITH LESS"

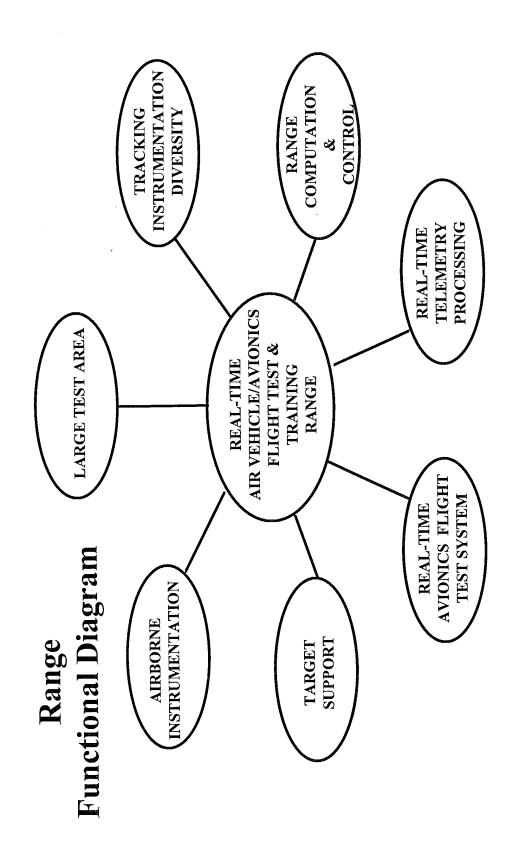


## ITERATIVE APPROACH

- Establish open communications with Atlantic Fleet operators.
- Establish dedicated fleet liaison to maintain continuity.
- Gain a better understanding of their training requirements:
- Through all Phases (Unit, Intermediate, Advanced, Joint)
  - By Warfare Areas (EW, ASW, Strike, AAW, etc.)
- By Platform (Aircraft type:F/A-18, F-14, E-2C, S-3,etc.) (Ship type: CVW, LPD, LPA, etc.)
- Current Shortcomings/Issues



### Atlantic Test Ranges





# ITERATIVE APPROACH continued...

- Comparison of their Training Range requirements with our Test Range Capabilities and Resources:
- Airspace
- Targets
- Instrumentation
- Specific Warfare or Mission Support
- Provided Range Capabilities Briefings & Facility Tours
- · Have offered and provided several "test drive" training ops
- Dispel the Fleet Perceptions of Pax River as the "Flying Club"



## CHRONOLOGY OF KEY EVENTS

- June: Initiative Begins...
- NAWC-AD Liaison met with CNAL Staff to gather information on training range needs/issues.
- July: NAWC-AD Representatives provided a focused brief to CNAL Staff in Norfolk
- NAWC-AD Personnel invited to attend CINCLANTFLT Range Prioritization Conference
- Aug: Liaison established initial contact with CINCLANTFLT
  - CNAL Staff Members Tour NAWC-AD
- of mutual benefit/concern for both test & training interop. - Pax River & NASA Wallops met to discuss/explore issues



## 1995 CHRONOLOGY continued...

- NASA Wallops to determine feasibility of using airfield Sept: - NAWC-AD coordinated visit by CNAL Staff LSO to for a much needed FCLP site.
- NAWC-AD Representatives provided a focused brief to CINCLANTFLT Staff in Norfolk
- flight of Range EW support capabilites & tour of Facilities - VAQ-209 EA-6B Aircrew/Staff were provided a demo
- Oct: Liaison made initial contact with SECONDFLEET Staff
- Follow-on CNAL Tour at NAWC-AD
- NAWC-AD Representatives provided a focused brief to Second Fleet Staff in Norfolk



## 1995 CHRONOLOGY continued...

- Nov: NAWC-AD Representatives provided a focused brief to Carrier Air Group Eight (CAG-8) Staff at NAS Oceana
- NAWC-AD personnel traveled to Strike Warfare Center NAS Fallon, NV to observe Carrier Air Wing Advance Training Phase Exercise and tour the Range.
- Dec: CAG-8 Staff Visit & Tour of NAWC-AD Range & Facilities
  - Discussions with VC-6 XO on potential interest of using NASA Wallops as a UAV Center



## 1996 CHRONOLOGY continued...

- NAWC-AD Reps Visited Aberdeen Test Center to Explore Joint Task Force Exercise (CJTFX) Planning Conference • Jan: - NAWC-AD w/ the invite by C2F attended the Combined Potential for expanded & joint range interest.
- Feb: NAWC-AD/DARO Visit & Tour of the AEGIS Combat Systems Center at NASA Wallops
- Mar: -Aberdeen Test Center & Army XVIII Corp Reps visit Pax for Facilities Tour & Capabilities Brief



## 1996 CHRONOLOGY continued...

- visit to conduct site survey for involvement in the CJTFX • Mar:- Second Fleet Staff & Air Force Air Re-Fuel Wing Staff
- Liaison Makes Initial Contact/Visit of US Army Garrison at A. P. Hill, VA.
- "Joint Test & Training Complex" (JTTC) Planning Conference (CTEIP Program, NAWCAD Lead)
- Apr: NAWC-AD Reps attended CJTFX Airspace Coordination Conference to provide face-to-face brief on Pax restricted airspace to be used during the exercise.



## KEY RESULTS TO DATE

- An established continuing dialogue now exists between NAWC & key Atlantic Fleet Staffs in Norfolk Area
- assessing the utility of Pax River for Fleet TACAIR training CNAL assigned Carrier Air Wing Eight the task of formally through the various phases and NASA Wallops for FCLP
- VAQ-209 flew an EA-6B on the Chesapeake Test Range for an EW Capabilities Demonstration "Test Drive." Two Applications were being explored:
- Mission Aircrew Training
- Mission Specific System Grooming Prior to Deployment



# KEY RESULTS TO DATE continued...

- NAWC-AD successfully supported a time critical Fleet HARMEX
- 2 VAQ-209 EA-6B's & 2 MAG-49 F/A-18's flew a highly successful Captive HARMEX against Pax Range Assets
- using many of the NAWC-AD range capabilites (Dec 95-Apr 96) CAG-8 plans several training missions in Pax River airspace



# KEY RESULTS TO DATE continued...

- CAG-8 Continues to fly training missions in Pax airspace and "MISSIONS CONSIDERED HIGHLY BENEFICIAL" issues message stating their preliminary findings:
- NAWC-AD will play an active role in the CJTFX 96-2
- Hosting 2 Air Force Air Re-Fuel Wings (KC-135's)
- Strike & Tactical Recon Missions in Pax River Airspace against Pax Targets
- NAWC-AD T&E Group and Aberdeen Test Center signed MOU
- Second Fleet Staff planning to include Pax River in JTFX 97-1



# KEY RESULTS TO DATE continued...

- CINCLANTFLT has requested support for emerging range requirements:
- MISSILEX Support:
- SLAM Target
- Shipboard No-Fire STD MISSILE Scoring System
- Shallow Water ASW Target
- The many tours and briefs provided by NAWC-AD has exposed a host of other unique capabilities to Commands and activities that St. Inigoes: Shipboard C4I, Identification Systems, IETM, etc.) did not know existed here at Pax. (i.e. Specialized Support at



### MUTUAL BENEFITS

- SHARED RESOURCE WITH INCREASED MRTFB RANGE UTILIZATION
- OPERATORS GAIN ACCESS TO ADDITIONAL TRAINING AREAS WITH ADDED RESOURCES & CAPABILITIES
- CLOSE PROXIMITY TO ATLANTIC FORCES
- REDUCED O&M COST TO SUPPORT TRAINING TAD
- ADDED VALUE TO DEPLOYED FORCES TO IMPROVE OPERATOR PROFICIENCY & READINESS



## MUTUAL BENEFITS continued...

- FLEET SCHEDULES RANGE SUPPORT & PAYS FOR SERVICES AS REQUIRED
- INCREASED SYNERGISM BETWEEN USER & DEVELOPER
- FURTHER PROMOTES INTEROPERABILITY BETWEEN TEST & TRAINING COMMUNITIES



### ISSUES & CONCERNS

- SHARED RESOURCES & CONFLICTS RESOLUTION:
- Airspace Compatibility
- Established Priorities (Test vs. Training)
- Critical Resources Scheduling i.e.:
- RDT&E has priority during normal hours
- Training has priority during off-hours

### • FUNDING:

- Atlantic Command(s) Block Fund NAWC-AD for Range Support Services (Desired)
- Forces (based on minimized personnel & instrumentation MRTFB develop a reduced range cost for Operational redundancy)